LAB.GRUPPEN

POWER AMPLIFIERS

iP 1150Q

KEY FEATURES:

4 x 130 watts @ 8 Ω
4 x 200 watts @ 4 Ω
4 x 270 watts @ 2 Ω
(Measured just below clip level, with all channels driven)

- **Compact design: 2U high**
- **Intercooler® cooling system with front-to-rear airflow**
- **Easily accessible dust filter**
- **Improved low-end power bandwidth**
- **Neutrik Combo jack**
- **Bridged mono outputs in one SpeakOn connector**

The iP 1150Q is a space-saving four channel power amplifier, ideal for use in installations as well as in cost-effective live sound systems.

The iP 1150Q offers a choice of applications, such as in multi-channel monitor systems, four-channel reproduction and compact amplification in active 2-, 3-, and 4-way systems.

The iP 1150Q gives the possibility to bridge connect one or two of the two pairs of channels (channel A and B and/or channel C and D).

The Iron Power (iP) family of power amplifiers is the new compact and versatile line of professional power amplifiers with classic toroidal iron transformers. To achieve a compact design, the latest semiconductor technology is utilized. This, together with Lab.gruppen's proprietary copper cooling system, Intercooler®, enhances the 2 ohms capacity. A easily accessible dust filter on the front ensure a clean front-to-rear airflow.

A new Bi-phase wiring scheme also increases the capacity of the power supply. This extends the power bandwidth in the low end.

Besides the traditionally superb Lab.gruppen sonic performance, there is a full line of features to make the iP family functional in all situations from installation to cost-effective live sound systems:

Versatile input connection

With the Neutrik Combo-jack we offer both the professional XLR-type standard and the semi-pro 1/4 " TRS phono-jacks.

Soft Start

Toroidal transformers require a huge amount of start current to build up a magnetic flux when the amplifier is switched on. Therefore Lab.gruppen have included a soft start circuit to minimize the risk of blowing the wall fuse and to reduce flickering in the lighting.

Sophisticated protection circuitry, combining:

– ALS™ short circuit protection; the Adaptive Limiting System permits very high peak currents, but keeps the amplifier within the Safe Operation Area.
– DC protection; protects against infrasonic signals
– VHF protection; protects the loudspeakers against strong very high frequency non-musical signals above the audible range.
– Thermal protection; prevents the amplifier from being overheated. The protection indicators on the front panel are switched on, as a warning, before the protection process is initiated.
– AC protection; shuts down the power supply if the line voltage is outside the operating voltage.
– Clip limiter; prevents severely clipped waveforms from reaching the loudspeakers, whilst maintaining full peak power.

SPECIFICATIONS iP 1150Q

MAX OUTPUT POWER [1]	**EIA** at 1 kHz and 1% THD	**FTC** 20-20kHz @0.1%THD
8 Ω four channels	130 W	120 W
4 Ω four channels	200 W	180 W
2 Ω four channels	270 W[2]	245 [2] W
8 Ω bridged stereo	400 W	360 W
4 Ω bridged stereo	540 W[2]	490 [2] W

Max output voltage	
8 ohms load	32 Vrms
Peak voltage, no load	51 V

Distortion etc.	
THD 20Hz-20kHz and 1W to full power	0,05 %
THD @ 1kHZ and –1dB under clip	0,01 %
DIM 30 at –3dB under clip	0,008 %

Hum and Noise	<-105 dB
Channel separation @10kHz	70 dB
Output impedance	30 mΩ
Slew Rate	30 V/µs

Inputs		
Gain	32 dB	
Impedance	20 kohm	
Common mode rejection	50 dB	
Front Panel		
Gain controls	(4) channel A, B, C and D	31 positions detent
Protect indicator	(4) yellow LEDs	80°C at heatsink or >12kHz at full power or shorted output
Clip Indicator	(4) red LEDs	Fast peak – slow release
Signal present indicator	(4) green LEDs	-40 dB below full output
On Indicator	(4) green LEDs	DC rail voltage for channel A, B, C and D
Rear Panel		
Input connectors	(4) Neutrik Combo XLR type, 3 pin & 1/4" jack	
Output connectors	(2) Neutrik 4-pole Speakon connectors	
Switches		
Clip limiter A and B	On-Off (switchable)	
Link-switches	A+B / B+C / C+D	

Power	**230 V version**	**115 V version**
Operation voltage	130 V-265 V AC	65 V – 135 V AC
Minimum start voltage	180 V	90 V AC
Full output power at 4ohms	230 V AC	115 V AC
Peak inrush current (Soft start limited)	10 A	5 A
Current Draw @ 4ohms&230V		
Quiescent power (no load)	0.6 Arms	1.2 Arms
1/8 of full power (-9dB)	2.9 Arms	6 Arms
1/3 of full power (-5dB)	4.5 Arms	9 Arms
At full power (0 dB) @1 kHz 1% THD	7.9 Arms	16 Arms

Net Dimensions mm (inch)	483 (19") W x 88 (3,5") H x 325 (12.8") D
Shipping Dimensions mm (inch)	560 (22") W x 180 (7.1") H x 500 (19.7") D
Net Weight	13.2 kg (29 lbs)
Shipping Weight	14.8 kg (32.5 lbs)

Approvals			
	CE	Emission	EN 55 103-1, E3
		Immunity	EN 55 103-2, E3, with S/N below 1% at normal operation level [4]
		Safety	EN 60 065, class I
	THX	iP1150T	

1) Specifications measured with 230 VAC
2) Component tolerance dependent
3) Continuous power, one channel driven or peak power both channels driven
(Thermal protection may occur at high continuous power)
4) Normal operation level 1/8 of full power or –9dB below clip level.

LAB. GRUPPEN reserve the right to alter functions or specifications without prior notice.

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Lab.gruppen AB, Gullregnsvägen 16, S-434 44 Kungsbacka, Sweden.
Tel. +46 300 168 23. Fax +46 300 142 46. e-mail: info@labgruppen.se www.labgruppen.se